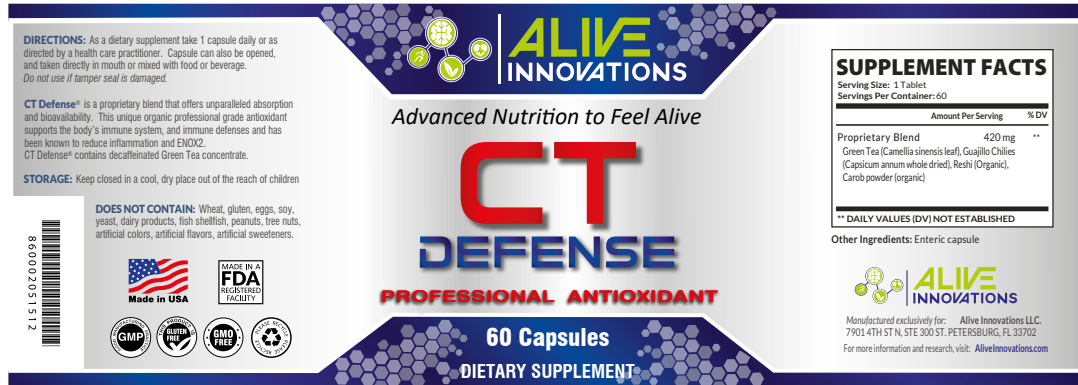




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What is CT DEFENSE?

CT Defense® is a proprietary blend of highly bioavailable antioxidant compounds, including Green Tea (decaffeinated) and Reishi. This unique formula is designed to support the body's immune defenses and healthy inflammatory response, and may assist in reducing ENOX2. The enteric capsule ensures that nutrients are delivered to the small intestine for optimal absorption.

Active Ingredients

Proprietary blend
Green Tea (Camellia sinensis leaf), Guajillo Chilies (Capsicum annum whole dried), Reshi (Ganoderma lucidum, organic), Carob powder (organic)

Benefits

Supports immune function

The imbalance between generation of (reactive oxygen species) ROS and antioxidant defense capacity is closely associated with impaired immunity.

Green tea polyphenols (GTPs) can greatly enhance immune response and lower the risk of inflammation and immune-related diseases¹. GTPs and their derived substances are shown to stimulate B-cell proliferation and antibody production.

1 <https://pubmed.ncbi.nlm.nih.gov/32454171/>



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GTPs may also enhance humoral immune response by increasing antibody-secreting cells in the spleen, and significantly increasing the immunoglobulin M (IgM)-mediated and IgG-mediated immune response to antigens.² Reishi is known as the “mushroom of immortality” and contains over 400 biologically active components with antiviral, anticancer, hepatoprotective, immunopotentiating, and hypocholesterolemic properties. Polysaccharides of *G. lucidum* (GLPs) were shown to increase white blood cell and lymphocytes, as well as IgA immunoglobulins.³

Protects against free radical damage

EGCG is a powerful antioxidant shown to prevent oxidative damage in healthy cells. Catechins in green tea are shown to scavenge reactive oxygen species, inhibit formation of free radicals, and prevent lipid peroxidation.⁴ *G. lucidum* polysaccharides demonstrate potent antioxidant activity and can protect tissues from reactive oxygen species toxicity, sustaining the oxidative state of the body.

The antioxidant activities of capsaicin are shown as comparable to synthetic antioxidants such as butylated hydroxyanisole (BHA) and butylated hydroxytoluene (BHT)⁵. The high level of radical scavenging activity in capsicum is influenced by the synergism between the total antioxidants. Extract of capsicum is shown to counteract ROS and NO deleterious intracellular damage, while its anti-inflammatory properties reduce ROS levels in lipopolysaccharide-activated cells.⁶

May assist in reducing inflammation

ROS are implicated in cell damage and vital for host defense, which are frequently associated with inflammation.⁷ GTPs within reishi are made up of polycyclic aromatic hydrocarbons, which can reduce oxidative free radicals and prevent critical cellular components from being oxidized. Supplementing with GTPs is shown to be effective in meliorating immune related diseases through attenuating oxidative stress.⁸

EGCG of green tea is shown to inhibit infiltration of inflammatory leukocytes.⁹ Expression of proinflammatory IL-8 may also be inhibited by EGCG.¹⁰ Green tea polyphenols were also able to modulate neutrophil-mediated- and lymphocyte-mediated inflammation in IL-2-deficient mice.¹¹

Reishi exhibits excellent anti-inflammatory activity by suppressing major cytokines, immunomodulatory molecules, and chemokines¹². The polysaccharides within reishi were shown to inhibit inflammation mediated by L-selectin, the complement system, and cytokines.¹³

May offer antitumor activity

Isolated polysaccharides from reishi are shown to increase anti-tumour immune responses by motivating the activity of natural killer cells and cytotoxic T-lymphocytes.¹⁴ Several in-vivo studies have demonstrated that reishi polysaccharides (β -D-glucans, heteropolysaccharides and glycoproteins) demonstrate antitumor activity in mice.¹⁵

Polyphenols in green tea leaves inhibit cell division as well as the induction of phase II antioxidant enzymes, which may support chemotherapeutic as well as preventive effects.¹⁶

Research suggests that the most potent inhibitors of ENOX2 (a protein secreted from tumor cells) are EGCG and the vanilloid, capsaicin.¹⁷ The effect of EGCG on growth inhibition of HeLa cells and on inhibition of the enzymatic activity of ENOX2 was found to be synergized in the presence of other inactive green tea catechins such as epicatechin (EC). Additionally, a preparation containing a synergistic combination of decaffeinated green tea and vanilloid-containing Capsicum was shown to kill cultured cancer cell lines at 100x the rate of green tea alone.¹⁸

2 <https://pubmed.ncbi.nlm.nih.gov/26478000/>
3 <https://pubmed.ncbi.nlm.nih.gov/31715242/>
4 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7084675/>
5 <https://arrow.tudublin.ie/schfsehart/124/>
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18 <https://academic.oup.com/jpp/article/55/7/987/6150366?login=false>



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Dosage and how to take

Adults: As a dietary supplement, take 1 capsule daily or as directed by a health care practitioner. Capsules can also be opened, and taken orally or mixed with food or beverage.

Do not use if tamper seal is damaged.

Safety & Side Effects

CT Defense has an excellent safety rating, with no reported interactions from the supplement.

CT Defense is not intended to replace any medication or procedures used to treat cancer, viral infections, or illnesses. Do not discontinue treatment or cancer medications without a doctor's permission.

Women who are pregnant, nursing, or any person who is immune-compromised should consult their physician before using this product. Certain medications may interact with individual ingredients – talk to your doctor if you take any medications.

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- Information and statements contained have not been confirmed by additional studies.